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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,817	04/24/2001	Erwin B. Bellers	US 010028	5944
24737 75	90 12/29/2003		EXAMI	NER
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			LEE, RICHARD J	
P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER
2			2613	d
	·		DATE MAILED: 12/29/2003	7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Application No.

Applicant(s) 09/840,817

Bellers

Office Action Summary

Richard Lee

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TI MANUNO DATE (A):	and the course back with the correspondence address
The MAILING DATE of this communication appears Period for Reply	on the cover sheet with the correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET THE MAILING DATE OF THIS COMMUNICATION.	<del>-</del>
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.136 (a).</li> <li>mailing date of this communication.</li> </ul>	In no event, however, may a reply be timely filed after SIX (6) MONTHS from the
<ul> <li>If the period for reply specified above is less than thirty (30) days, a reply withing the period for reply is specified above, the maximum statutory period will appear a reply within the set or extended period for reply will, by statute, cause.</li> <li>Any reply received by the Office later than three months after the mailing date earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>	by and will expire SIX (6) MONTHS from the mailing date of this communication. e the application to become ABANDONED (35 U.S.C. § 133).
Status	
1) X Responsive to communication(s) filed on Sep 22, 2	2003
2a) ☑ This action is <b>FINAL</b> . 2b) □ This ac	tion is non-final.
3) Since this application is in condition for allowance closed in accordance with the practice under Ex pa	except for formal matters, prosecution as to the merits is re Quayle, 1935 C.D. 11; 453 O.G. 213.
Disposition of Claims	
4) 💢 Claim(s) <u>1-20</u>	is/are pending in the application.
4a) Of the above, claim(s)	is/are withdrawn from consideratio
5) Claim(s)	is/are allowed.
6) 💢 Claim(s) <u>1-20</u>	is/are rejected.
7) Claim(s)	is/are objected to.
8) Claims	are subject to restriction and/or election requirement
Application Papers	
9) The specification is objected to by the Examiner.	
10) The drawing(s) filed on is/ai	e all accepted or bil objected to by the Examiner.
Applicant may not request that any objection to the control of the	rawing(s) be held in abeyance. See 37 CFR 1.85(a).
11) The proposed drawing correction filed on <u>Sep 2</u> .	2, 2003 is: $\mathbf{a}\mathbf{x}$ approved $\mathbf{b}\mathbf{x}$ disapproved by the Examine
If approved, corrected drawings are required in reply	to this Office action.
12) The oath or declaration is objected to by the Exam	iner.
Priority under 35 U.S.C. §§ 119 and 120	
13) $\square$ Acknowledgement is made of a claim for foreign p	riority under 35 U.S.C. § 119(a)-(d) or (f).
a) $\square$ All b) $\square$ Some* c) $\square$ None of:	
1. Certified copies of the priority documents have	e been received.
2. Certified copies of the priority documents have	e been received in Application No
application from the International Bure	
*See the attached detailed Office action for a list of th	
14) Acknowledgement is made of a claim for domestic	
a) L The translation of the foreign language provisional 15) Acknowledgement is made of a claim for domestic	
Attachment(s)	priority under 35 0.3.C. 33 120 and/or 121.
Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413) Paper No(s).
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of Informal Patent Application (PTO-152)
3) X Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7	6)

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 2. Claims 1, 2, 4-6, 8-10, 12-14, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by de Haan et al of record ("True-Motion Estimation with 3-D Recursive Search Block Matching) for the same reasons as set forth in paragraph (5) of the last Office Action (see Paper no. 5).
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 3, 7, 11, 15, 16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Haan et al of record ("True-Motion Estimation with 3-D Recursive Search Block Matching) for the same reasons as set forth in paragraph (7) of the last Office Action (see Paper no. 5).
- 5. Regarding the applicant's arguments at pages 15-17 of the amendment filed September 22, 2003 concerning in general that "... The de Haan reference teaches a motion estimation algorithm ... the de Haan reference teaches an algorithm that calculates a displacement vector to

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move pixels to a new position in an intermediate field when performing a field rate upconversion from a lower field rate to a higher field rate. Thus, the de Haan reference does not teach an enhancement unit enhancing a characteristics other than position, as recited in Claim 1 of the Application ...", the Examiner respectfully disagrees. The spatial and temporal predictions of de Haan (see sections II and IV) involve motion estimation through the use of block matchings where the minimum summed absolute differences between blocks are calculated to select the best candidate block (i.e., with a corresponding best candidate vector indicating the best displacement offset, see second sentence of Section IV of de Haan). And by providing the best candidate block through the minimum SAD calculations, de Haan is providing the best estimated block image and as such it is submitted again that de Haan provides the same enhancement unit (i.e., estimators (a and b), see Section IV) enhancing a characteristic other than position of a selected pixel region of video information utilizing at least one candidate enhancement vector of enhancement algorithms to generate an enhanced pixel region for each candidate enhancement vector, as claimed. It is further noted that de Haan is interested in providing smoothness of images through spatial and temporal predictions by adding penalties to the error functions involved in block matching (see Section VI, pages 372-373). By smoothing the images, de Haan provides the same enhanced pixel region equivalent to enhancement of the selected pixel region utilizing a respective candidate enhancement vector of enhancement algorithms as claimed.

Regarding the applicant's arguments at pages 17-20 of the amendment filed September 22, 2003 concerning in general claims 2-20, the Examiner wants to point out that such arguments

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have been addressed in the above. The applicant is further reminded that: One of ordinary skill in the art is presumed to possess a certain amount of background knowledge independent of the references. In re Sovish, 769 F.2d 738, 226 USPQ 771 (Fed. Cir. 1985); In re Jacoby, 309 F.2d 513, 135 USPQ 317 (C.C.P.A. 1962). The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Bozek, 416 F.2d 1385, 163 USPQ 545 (C.C.P.A. 1969). With the above in mind, it is submitted again that one skilled in the art would certainly have no difficulty in recognizing the coefficients present within the candidate vector C of equation (26) of de Haan and that the penalties that are added to the error function as shown in equation (26) also varies based upon coefficients for each candidate enhancement vector within the equation for the same well known spatial and temporal smoothing purposes as claimed.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

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will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

# 7. Any response to this final action should be mailed to:

#### **Box AF**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

#### or faxed to:

(703) 872-9314, (for formal communications; please mark "EXPEDITED PROCEDURE") (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (703) 308-6612. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group customer service whose telephone number is (703) 306-0377.

RICHARD LEE AND THE PRINCIPLE OF THE PRI

Richard Lee/rl

12/24/03